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EXAMINER

DAVIS, TEMICA M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2681

24

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/132,351

Applicant(s)

KIM, ROE-KWAN

Examiner

Temica M. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/1/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Sanders, III et al (Sanders), U.S. Patent No. 6,026,296.

Regarding claim 1, Sanders discloses a method for transmitting a short message to a plurality of subscribers in a mobile communication system (col. 7, lines 4-20; figures 1 and 6), comprising the steps of:

- registering a plurality of called subscriber numbers in a short message service center of said mobile communication system by associating each of said plurality of called subscriber numbers with a group identifier, the group identifier being a separately defined field from device identifiers (IDs) of the plurality of the called subscribers (which reads on the target address of a dispatch controller 103 which is a separate entity from the existing cellular network as shown in figure 1) (col. 2, lines 37-65 , col. 7, lines 4-20 and col. 10, lines 17-41); and

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- simultaneously transmitting said short message to each of said plurality of called subscriber numbers by designating said group identifier (col. 10, lines 17-41).

Regarding claim 9, Sanders discloses a method for transmitting a short message to a plurality of subscribers in a mobile communication system (col. 7, lines 4-20), comprising the steps of:

- transmitting from a mobile communication terminal a short message registration signal including a short message service center number, a group identifier and at least one subscriber number, the group identifier being a separately defined field from device identifiers (IDs) of the mobile communication terminal and the plurality of the subscribers (which reads on the target address of a dispatch controller 103 which is a separate entity from the existing cellular network as shown in figure 1) (col. 2, lines 37-65, col. 7, lines 4-20 and col. 10, lines 17-41);

- detecting, by a short message service center, said group identifier from said short message registration signal (col. 10, lines 17-41); and

- registering said transmitted subscriber numbers in said short message service center in accordance with said detected group identifier (col. 2, lines 37-65 and col. 7, lines 4-20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 7, 8, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Huotari, U.S. Patent No. 5,987,323.

Regarding claim 2, Sanders discloses in a mobile communication system having a plurality of base station subsystems for demodulating signals received from a plurality of corresponding mobile communication terminals and a mobile switching center, operatively connected to said plurality of base station subsystems, for detecting a short message service center number from said demodulated signals and for switching to a corresponding short message service center through a gateway, a method for transmitting a short message to a plurality of subscribers (figure 1), comprising the steps of:

- transmitting short message information from one of said mobile communication terminals, said short message information including a group identifier and a short message, the group identifier being a separately defined field from device identifiers of the plurality of the base station subsystems and the plurality of the mobile communication terminals (which reads on the target address of a dispatch controller 103 which is a separate entity from the existing cellular network as shown in figure 1) (col. 2, lines 37-65, col. 7, lines 4-20 and col. 10, lines 17-41);

- detecting, by said short message service center, said group identifier from said short message information (col. 10, lines 17-41); and

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- simultaneously transmitting said short message to subscriber numbers associated with said detected group identifier (col. 10, lines 17-41 and col. 10, lines 44-52).

Sanders, however, fails to specifically disclose wherein the short message service center has a memory.

Huotari discloses a short message service center having a memory (col. 3, lines 26-39).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Sanders with the teachings of Huotari for the purpose of having the capability to store short messages when the desired mobiles are not reachable (Huotari, col. 3, lines 26-30).

Regarding claim 7, the combination of Sanders and Huotari discloses the method of claim 2, and further discloses wherein said step of detecting the group identifier from said short message information includes the substeps of:

- determining if said short message information is received (Sanders, col. 10, lines 31-41);

- determining if said short message information is a group transmission mode or a normal short message mode when said short message information is received (Sanders, col. 10, lines 21-41);

- detecting said short message from said short message information (Sanders, col. 10, lines 21-41); and

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- detecting said group identifier from said short message information (Sanders, col. 10, lines 21-41).

- storing said short message (Huotari, col. 3, lines 26-30).

Even though the Huotari uses a single subscriber in which a message can be stored for, and not a group of subscribers, it would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of Sanders (e.g. group communication, col. 9, lines 20-35 and col. 10, lines 17-41), with the teachings of Huotari for the purpose of being able to retransmit the SMS message at a later time if the SMS message is unable to be reached by the targeted subscribers.

Regarding claim 8, the combination of Sanders and Huotari discloses the method of claim 2, and further discloses wherein said step of simultaneously transmitting said short message includes the substeps of:

- determining if said detected group identifier exists in said memory of said short message service center (Sanders, col. 8, lines 39-55 and Huotari, col. 3, lines 26-30);

- reading from said memory subscriber numbers corresponding to said detected group identifier if the detected group identifier exists in said memory (Sanders, col. 8, lines 39-55 and Huotari, col. 3, lines 26-30); and

- dialing (inherent as evidenced by the fact that the subscribers, e.g. target communication devices, were transmitted the short message) said subscriber numbers read from said memory to transmit said short message thereto (Sanders, col. 10, lines 28-40 and Huotari, col. 3, lines 26-30).

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Regarding claim 13, Sanders discloses the method of claim 9 as described above.

Sanders however, fails to specifically disclose storing the group identifier from the short message registration signal.

Huotari discloses a method wherein an SMS center can store messages directed to mobiles when the mobiles are not reachable (col. 3, lines 26-30)

Regarding storing the group identifier in a memory of the SMS center, the examiner contends that this limitation is an engineering decision predicated on need performance, and therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to implement this limitation for the purpose of needing to recall the group identifier in the instance where the SMS message had to be transmitted by the SMS center at a later time if the terminating mobile was not reachable as taught by Huotari (col. 3, lines 26-30).

Regarding claim 14, Sanders discloses the method of claim 9 as described above, and further discloses wherein said step of registering said transmitted subscriber numbers comprises the step of detecting said transmitted subscriber numbers (col. 10, lines 17-41).

Sanders, however, fails to specifically disclose assigning a plurality of addresses corresponding to the detected group identifier; and storing each of said subscriber numbers in a corresponding one of said addresses.

Huotari discloses a method wherein an SMS center can inherently assign an address for an SMS message as evidenced by the fact that the center can store an

SMS message directed to a terminating mobile if that mobile is not able to be reached (col. 3, lines 26-30).

Even though the Huotari uses a single subscriber in which a message can be stored for, and not a group of subscribers, it would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of Sanders (e.g. group communication, col. 9, lines 20-35 and col. 10, lines 17-41), with the teachings of Huotari for the purpose of being able to retransmit the SMS message at a later time if the SMS message is unable to be reached by the targeted subscribers.

5. Claims 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders, III et al (Sanders), U.S. Patent No. 6,026,296 and Huotari, U.S. Patent No. 5,987,323 as applied to claim above, and further in view of applicants own admission.

Regarding claim 3, the combination of Sanders and Huotari discloses the method of claim 2 as described above, and further discloses a method wherein a user can press a button on their mobile phone to send a short message to a group of target users (Sanders, col. 10, lines 42-52).

The combination, however, fails to specifically disclose the method wherein the step of transmitting the short message information from said mobile communication terminal includes the steps of:

- displaying a plurality of menus;
- selecting a short message service menu from said plurality of displayed menus;

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- displaying a first set of sub-menus associated with said short message service menu, said first set of sub-menus including a short message transmission mode and a short message group registration mode sub-menu;
- instructing a calling subscriber to input a short message service center number in response to selecting said short message transmission mode sub-menu;
- displaying a second set of sub-menus associated with said short message transmission mode, said second set of sub-menus including a group transmission mode and a normal transmission mode sub-menu;
- inputting said group identifier and said short message if said group transmission mode is selected; and
- transmitting a short message signal including said short message center number, said group identifier and said short message.

However, the applicant has provided a conventional short message transmission operation which meets the limitations of claim 3 (page 4, lines 6-18).

Even though the applicant's admitted prior art uses a single transmission mode, and not a group transmission mode, it would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of Sanders (e.g. group transmission, col. 10, lines 17-41), and Huotari with the teachings of the admitted prior art for the purpose of being able to send a short message to a group of subscribers at one time.

Regarding claim 4, the combination of Sanders, Huotari, and admitted prior art discloses the method of claim 3, and further discloses wherein said short message

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signal is transmitted by actuating a transmit key of said mobile communication terminal (Sanders, col. 10, lines 44-52 and applicant, page 4, lines 15-18).

Regarding claim 6, the combination of Sanders, Huotari, and admitted prior art discloses the method of claim 3, and further discloses wherein said plurality of menus are displayed by actuating a menu key of said mobile communication terminal (applicant, page 4, lines 6-9).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders, III et al (Sanders), U.S. Patent No. 6,026,296, and applicants own admission as applied to claim 3 above, and further in view of Alanara et al (Alanara), U.S. Patent No. 5,878,351.

Regarding claim 5, the combination of Sanders and applicant's own admission discloses the method of claim 3, and further discloses wherein said step of inputting said group identifier and said short message includes the substeps of:

- instructing a calling subscriber to input an identifier (applicant, page 4, lines 6-18);
- determining if the identifier is input (applicant, page 4, lines 6-18);
- instructing said calling subscriber to input said short message (applicant, page 4, lines 6-18); and
- determining if a short message end signal is input (applicant, page 4, lines 6-18).

The combination, however, fails to specifically disclose storing the short message in the memory of said mobile communication terminal if said short message end signal is input, and also fails to disclose storing said input group identifier in a memory of said mobile communication terminal.

Alanara discloses storing a short message in the memory of a mobile communication terminal if a short message end signal is input (col. 6, line 56-col. 7, line 6).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Sanders and the applicant's own admission with the teachings of Alanara for the purpose of having the capability to retransmit the user originated SMS message at a later time if the SMS message is unable to be transmitted (Alanara, col. 6, line 63-col. 7, line 1).

Regarding storing the input group identifier in a memory of the mobile communication terminal, the examiner contends that this limitation is an engineering decision predicated on need performance, and therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to implement this limitation for the purpose of needing to recall the group identifier in the instance where the SMS message had to be retransmitted by the originating user at a later time as taught by Alanara described above.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders, III et al (Sanders), U.S. Patent No. 6,026,296 and applicant's own admission.

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Regarding claim 10, Sanders discloses the method of claim 9 as described above.

Sanders, however, fails to specifically disclose wherein said step of transmitting said

short message registration signal comprises the steps of:

- displaying a plurality of menus;
- selecting a short message service menu from said plurality of displayed menus;
- displaying a first set of sub-menus associated with said short message service menu, said first set of sub-menus including a short message transmission mode and a short message group registration mode;
- instructing a calling subscriber to input a short message service center number in response to selecting said short message group registration mode sub-menu;
- inputting said group identifier and said subscriber numbers; and
- transmitting said short message signal including said short message service center number, said group identifier and said subscriber numbers.

However, the applicant has provided a conventional short message transmission operation which meets the limitations of claim 3 (page 4, lines 6-18).

Even though the applicant's admitted prior art uses a single transmission mode, and not a group transmission mode, it would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of Sanders (e.g. group transmission, col. 10, lines 17-41) with the teachings of the admitted prior art for the purpose of being able to send a short message to a group of subscribers at one time.

Allowable Subject Matter

8. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to suggest or render obvious the limitation of claim 11 determining if a subscriber number end key is actuated; and instructing a caller to input another desired subscriber number if said subscriber number end key is not actuated.

Claim 12 is dependent on objected claim 11, and would be allowable solely as a result of its dependence from claim 11.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached Monday through Friday (alternate Fridays) between 9am and 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on (703) 308-0123. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

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Temica M. Davis
Examiner
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TMD
March 14, 2004


TEMICA M. DAVIS
PATENT EXAMINER